UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,106	11/09/2001	Daniel K. Schiffer	KCC-15,891	3014

35844 7590 08/31/2007

PAULEY PETERSEN & ERICKSON
2800 WEST HIGGINS ROAD
HOFFMAN ESTATES, IL 60169

EXAMINER	
CHOI, PETER Y	
ART UNIT	**PAPER NUMBER**
1771	

MAIL DATE	DELIVERY MODE
08/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/036,106
Filing Date: November 09, 2001
Appellant(s): SCHIFFER ET AL.

Maxwell J. Petersen
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed June 11, 2007, appealing from the Office action mailed December 8, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner. 35 U.S.C. 102(b) rejection of claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58 as anticipated by Gallagher.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,171,308	GALLAGHER	12-1992
4,698,372	MOSS	10-1987
5,955,187	McCORMACK	09-1999
5,968,404	TRINH	10-1999
5,139,687	BORGHER	08-1992
6,028,160	CHANDLER	02-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58 are rejected under 35 U.S.C. 103(a) as obvious over, USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss.

Regarding claims 21-26, 31, 35, 38-40, 48, 49, 53, 54, and 56-58, Gallagher discloses a breathable outer cover laminate comprising a breathable, stretch-thinned barrier film having one or more layers, one of the layers including a mixture of filler particles and a biodegradable thermoplastic polymer, having voids formed around the filler particles, constituting 50-100% of

a thickness of the film, each of the layers including a biodegradable thermoplastic polymer, and a fibrous nonwoven web continuously laminated face-to-face with the film and including a biodegradable thermoplastic polymer, the polymer selected from the group consisting of polylactic acid polymers, polyester terpolymers of butanediol, adipic or succinic acid, and terephthalic acid, polycaprolactone polymers and combinations thereof (see entire document including column 3 lines 53-60, column 9 lines 1-5, column 9 lines 44-48, column 9 lines 49-55, column 18 lines 12-13, column 11 lines 49-56, column 7 lines 39-50, column 12 lines 26-55).

In the event it is shown that Gallagher does not disclose the claimed invention with sufficient specificity, the invention is obvious because Gallagher discloses the claimed constituents and discloses that they may be used in combination.

Regarding claims 22 and 23, the film and nonwoven web are adhesively or thermally bonded together (column 8 lines 60-63, column 8 lines 57-60).

Regarding claims 24 and 25, the nonwoven web comprises a spunbonded web or a meltblown web (column 8 lines 45-48, column 8 lines 64-68).

Regarding claim 26, the nonwoven web comprises an air laid web (column 9 lines 35-40).

Regarding claims 31,35, 57, and 58, a personal care article or medical article comprises the breathable laminate (column 10 line 52 to column 11 line 25).

Regarding claims 38 and 39, the inorganic filler particles comprise calcium carbonate (column 12 lines 26-35).

Regarding claim 40, the filler particles comprise organic filler particles (Gallagher, column 12 lines 45-48, and Moss, column 5 lines 51-55).

Regarding claims 48 and 49, Gallagher does not appear to teach biaxial stretching of the laminate, although Gallagher does mention forming a nonwoven fabric by stretching (column 9 lines 1-5). However, Gallagher references Moss which discloses a microporous polymeric film having good water vapor transmission rates formed by stretching uniaxially, biaxially or radially (Moss, column 8 lines 40-45). It would have been obvious to one skilled in the art at the time the invention was made to stretch the laminate uniaxially or biaxially to form an interconnecting network of voids around the filler particles, as taught by Moss, motivated by the desire to stretch the nonwoven fabric to optimize the laminate according to the desired overall porosity and pore size (column 9 lines 15-23).

Regarding claim 54, the biodegradable thermoplastic polymers are selected from the group consisting of polylactic acid polymers, polyester terpolymers of butanediol, adipic or succinic acid and terephthalic acid, polycaprolactone polymers and combinations thereof (see entire document including column 7 lines 39-50).

3. Claims 41, 44-47 and 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31,35, 38-40, 53, 54, and 56-58, and further in view of USPN 5,955,187 to McCormack.

Regarding claims 41,44-47 and 50-52, Gallagher does not appear to teach that the filler particles may comprise water-swellable filler particles. However, McCormack teaches a breathable microporous film layer used in personal care disposable products or surgical gowns containing filler particles which are water-swellable natural or synthetic superabsorbent materials and which comprise 10-70% by weight of the film layer (column 5 lines 35-58). It would have

been obvious to one of obvious to one skilled in the art at the time the invention was made to add water-swellable filler particles to the laminate in Gallagher in an amount of 10-70 percent by weight, as taught by McCormack, motivated by the desire to customize the fluid stability of the composition in Gallagher with suitable filler particles and motivated by the expectation of successfully practicing the invention of Gallagher.

Regarding claims 51 and 52, a personal care article or medical article comprises the breathable laminate (Gallagher, column 10 line 52 to column 11 line 25, and McCormack, column 2 lines 8-12).

4. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31, 35, 38-40, 53, 54, and 56-58, in view of USPN 5,139,687 to Borgher or USPN 5,968,404 to Trinh.

Regarding claims 42 and 43, Gallagher teaches that the disposable composites formed are biodegradable so long as water is present (column 1 line 62 to column 2 line 2). Additionally, appropriate fillers may be added to enhance disintegratability, particularly finely divided particulates (column 12 lines 26-35). Gallagher does not appear to teach that the filler may be a biodegradable filler comprising a cyclodextrin: However, Borgher teaches the use of cyclodextrin, preferably alpha-cyclodextrin, in disposable absorbent products like diapers and catamenial articles (Borgher, column 3 line 65 to column 4 line 65) applied as a spray or as a powder (Borgher, column 25 line 7-20). Trinh teaches the use of alpha-cyclodextrin, which are highly water-soluble (Trinh, column 7 line 46 to column 8 line 53), in the form of a spray of very fine or finely divided particles or droplets (Trinh, column 40 lines 14-19). Additionally, as

disclosed in Appellants' specification, cyclodextrin compounds and their derivatives, including alpha cyclodextrin, are inherently biodegradable (paragraph 0030 and 0031).

As it was known in the diaper art to add cyclodextrin compounds to disposable diapers at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the fillers disclosed in Gallagher with the inherently biodegradable cyclodextrin, as taught in Borgher and Trinh, motivated by the desire to use appropriate fillers which enhance disintegratability by being highly water-soluble or biodegradable while being particularly finely divided particulates.

5. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,171,308 to Gallagher in view of USPN 4,698,372 to Moss, as applied to claims 21-26, 31,35, 38-40, 48, 49, 53,.54, and 56-58 above, and further in view of USPN 6,028,160 to Chandler.

Regarding claim 37, Gallagher and Moss do not appear to disclose the claimed terpolymers of butanediol, terephthalic acid, and adipic acid. However, functionally equivalent biodegradable polymeric film-forming materials, including the claimed terpolymer, are commercially available as prepared compositions. The Chandler reference discloses a functionally equivalent material, Ecoflex (column 2 lines 54-57), which is a biodegradable film-forming composition comprising a terpolymer of butanediol, terephthalic acid, and adipic acid. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use commercially available functional equivalents in practicing that which is taught by Gallagher and Moss. One of ordinary skill in the art would have been motivated by convenience and efficiency provided by a commercially available prepared composition.

(10) Response to Argument

Anticipation Rejection Based on Gallagher in View of Moss

The 35 U.S.C. 102(b) Rejection as anticipated by Gallagher is withdrawn.

Rejection of Claims 21-26, 31, 35, 38-40, 48, 49 and 54 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss.

Contrary to the current rejection Appellants first assert that Gallagher explicitly teaches away from using polyesters and polyester derivatives which are not based on polyethylene terephthalate copolymerized with non-aromatic diacid, such as adipic and gultaric acids, and containing alkali metal or alkaline earth metal sulfo groups, such as a metal 5-sulfoisophthalic acid derivative. Appellants support their assertion by citing column 2 lines 34-40 of the Gallagher reference to show that Gallagher explicitly teaches away from using the claimed biodegradable polymers and a person of ordinary skill in the art would not have considered it obvious to use these polymers based on the disclosure of Gallagher. Second, Appellants assert that Moss cannot be combined with Gallagher since Moss teaches copolymers and terpolymers of caprolactam and Gallagher explicitly teaches away from using polycaprolactone and certain other polyester polymers. Third, Appellants assert that the substitution of polymers proposed by Examiner results from improper hindsight and improperly refusing to consider Gallagher in its entirety. Fourth, Appellants assert that Gallagher does not disclose a breathable outer cover laminate of a film and a nonwoven web, in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer.

Regarding Appellants' first argument, Examiner respectfully disagrees. First, the part of the disclosure of Gallagher that Appellants' rely is a description of related art. Examiner does not rely on the description of related art as support for the Rejection. Second, as set forth in the Rejection, Gallagher teaches a biodegradable thermoplastic polymer (*for example*, Gallagher column 1 line 49 to column 2 line 22, claim 1). Third, Gallagher clearly teaches that polycaprolactone may be added to the polyester of the invention (column 7 lines 39-50), which would form a polycaprolactone polymer within the scope of the claim. The claim recites that polycaprolactone polymers are a suitable alternative to the claimed invention and the polycaprolactone-containing polyester of Gallagher appears to anticipate this limitation.

Regarding Appellants' argument that Gallagher teaches away from the use of polycaprolactone polymers, Gallagher only teaches that polycaprolactone alone has not been widely adopted in high volume uses because they are *either* too expensive *or* their properties are inadequate for the uses mentioned above. Gallagher does not appear to teach away from the polyester of the invention including polycaprolactone since Gallagher expressly teaches that polycaprolactone may be added to the polyester of the invention. Additionally, Gallagher teaches that the polyester may be derived from adipic acid and terephthalic acid as recited in column 3 line 61 to column 4 line 9. Column 4 lines 10-19 appear to teach that a preferred polyester may have adipic acid in a polyester terpolymer, wherein the other monomer units are polyethylene ether glycols (abbreviated DEG) and 5-sulisophthalic acid (abbreviated 5SI), which reads on the claim limitation. Therefore, the biodegradable thermoplastic polymer of Gallagher appears to read on the claimed biodegradable thermoplastic polymer.

Regarding Appellants' second argument, Examiner respectfully disagrees. It should be noted that Moss is not relied upon to teach a biodegradable thermoplastic polymer. Although Appellants argue that Moss can not be combined with Gallagher, Gallagher expressly references Moss to teach microporous films when the invention of Gallagher includes filler materials (Gallagher, column 12 lines 45-48). Therefore, the Moss may clearly be combined with Gallagher with respect to the properties or techniques associated with forming a microporous film of the invention of Gallagher.

Regarding Appellants' third argument, Examiner respectfully disagrees. Examiner does not rely on hindsight and considers Gallagher in totality. Gallagher clearly teaches a biodegradable thermoplastic polymer and clearly does not teach away from either a polycaprolactone-containing polyester of the invention or a polyester terpolymer of adipic acid.

Regarding Appellants' fourth argument, Examiner respectfully disagrees. It should be noted that a patent for a combination, which only unites old elements with no change in their respective functions, obviously withdraws what is already known into the field of its monopoly and diminishes the resources available to skillful men. Where the combination of old elements performed a useful function, but it added nothing to the nature and quality of the subject matter already patented, the patent fails under 35 U.S.C. 103(a). When a patent simply arranges old elements with each performing the same function it had been known to perform and yields no more than one would expect from such an arrangement, the combination is obvious.

Gallagher teaches that the biodegradable thermoplastic polymer of the invention may be used in many combinations including in a nonwoven laminated to a nonwoven (column 9 lines 44-48), a nonwoven laminated to a film (column 10 lines 15-19), or specifically those set forth in

column 10 line 52 to column 12 line 25. Included in these embodiments, is a topsheet which is water permeable comprising a film (column 11 lines 49-56). A water permeable film is inherently breathable since it can be presumed that a film which allows water to pass through the film would additionally allow water vapor to pass through the film. Additionally, Moss is relied upon to teach that a microporous polymeric film having good water vapor transmission rates may be formed by stretching (Moss, column 8 lines 40-45) which is particularly suitable in applications such as breathable waterproof garments, diaper liners, and blankets (Moss, column 9 lines 24-31).

Gallagher teaches that the biodegradable thermoplastic polymer of the invention may be used in many combinations including in a nonwoven laminated to a nonwoven (column 9 lines 44-48), a nonwoven laminated to a film (column 10 lines 15-19), or specifically those set forth in column 10 line 52 to column 12 line 25. Additionally, Gallagher teaches that the polyesters of the invention may be fibers, in nonwoven sheets or films, foams, coating, laminates, molded articles, or wherever polyesters with such properties are desired (Gallagher, column 8 lines 27-32). It should be noted that Gallagher teaches that the purpose of the invention includes providing disposable components useful in disposable products (column 1 line 48 to column 2 line 22). Presumably, based on the teachings of Gallagher, the disposable products, such as the disposable diapers comprising such materials would consist entirely of biodegradable products as Gallagher sets forth all of the components of a disposable diaper in column 11 line 42 to column 12 line 25, and the disposable product would only be disposable or compostable if all of the component parts were disposable or compostable.

Even if it is shown that Gallagher does not appear to teach a film and a nonwoven wherein each of the film and the nonwoven comprise biodegradable thermoplastic polymers, based on the teachings of Gallagher in view of Moss, the claimed invention would have been obvious to one of ordinary skill in the biodegradable textile art since Gallagher teaches that the biodegradable thermoplastic polymer may be formed in the manner claimed and laminated as claimed.

Therefore, Gallagher in view of Moss appears to teach a substantially similar structure and composition as the claimed invention and anticipates the claims.

Rejection of Claims 53 and 56-58 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss.

Appellants reiterate that Gallagher does not teach a breathable film and the nonwoven web is not thermoplastic as claimed. Additionally, Appellants assert that neither Moss nor Gallagher, alone or combined, discloses a breathable outer cover laminate in which each layer of the film and the fibrous nonwoven web includes a biodegradable thermoplastic polymer.

Regarding Appellants' first argument, Examiner respectfully disagrees. As set forth above, Gallagher teaches a water permeable film which is inherently breathable. Additionally, Gallagher teaches stretching of films and microporous films formed by techniques set forth in Moss, wherein Moss teaches stretching microporous films to form breathable waterproof garments, diaper liners and blankets based on the pore size created by the stretching (Moss, column 9 lines 15-31). Therefore, Gallagher or Gallagher in view of Moss clearly teaches a breathable film.

Regarding Appellants' second argument, Examiner respectfully disagrees. As set forth above, Gallagher teaches that the biodegradable thermoplastic polymer of the invention may be used in many combinations including in a nonwoven laminated to a nonwoven (column 9 lines 44-48), a nonwoven laminated to a film (column 10 lines 15-19), or specifically those set forth in column 10 line 52 to column 12 line 25. Additionally, Gallagher teaches that the polyesters of the invention may be fibers, in nonwoven sheets or films, foams, coating, laminates, molded articles, or wherever polyesters with such properties are desired (Gallagher, column 8 lines 27-32). It should be noted that Gallagher teaches that the purpose of the invention includes providing disposable components useful in disposable products (column 1 line 48 to column 2 line 22). Presumably, based on the teachings of Gallagher, the disposable products, such as the disposable diapers comprising such materials would consist entirely of biodegradable products as Gallagher sets forth all of the components of a disposable diaper in column 11 line 42 to column 12 line 25, and the disposable product would only be disposable or compostable if all of the component parts were disposable or compostable.

Even if it is shown that Gallagher does not appear to teach a film and a nonwoven wherein each of the film and the nonwoven comprise biodegradable thermoplastic polymers, based on the teachings of Gallagher in view of Moss, the claimed invention would have been obvious to one of ordinary skill in the biodegradable textile art since Gallagher teaches that the biodegradable thermoplastic polymer may be formed in the manner claimed and laminated as claimed.

Rejection of Claims 41 and 44-47 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss and further in view of McCormack.

Appellants reiterate that Gallagher teaches away from using polyesters and polyester derivatives, and that Gallagher does not disclose a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer. Additionally, Appellants assert that McCormack does not supply the disclosure missing from Gallagher and Moss.

Regarding Appellants' first argument, Examiner respectfully disagrees. As set forth above, Gallagher does not appear to teach away from the polyester of the invention including polycaprolactone since Gallagher expressly teaches that polycaprolactone may be added to the polyester of the invention. Additionally, Gallagher teaches that the polyester may be derived from adipic acid and terephthalic acid as recited in column 3 line 61 to column 4 line 9. Column 4 lines 10-19 appear to teach that a preferred polyester may have adipic acid in a polyester terpolymer, wherein the other monomer units are polyethylene ether glycols (abbreviated DEG) and 5-sulisophthalic acid (abbreviated 5SI), which reads on the claim limitation. Therefore, the biodegradable thermoplastic polymer of Gallagher appears to read on the claimed biodegradable thermoplastic polymer.

Additionally, Gallagher teaches a water permeable film which is inherently breathable. Gallagher teaches stretching of films and microporous films formed by techniques set forth in Moss, wherein Moss teaches stretching microporous films to form breathable waterproof garments, diaper liners and blankets based on the pore size created by the stretching (Moss, column 9 lines 15-31). As set forth above, the invention of Gallagher in view of Moss appears to

teach a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer or it would have been obvious to one of ordinary skill in the biodegradable textile art to form such a structure based on the teachings of Gallagher in view of Moss. Therefore, Gallagher or Gallagher in view of Moss clearly teaches a breathable film and nonwoven web in which the film and the web comprise a biodegradable thermoplastic polymer.

Regarding Appellants' second argument, Examiner respectfully disagrees. It should be noted that Examiner does not rely on McCormack to teach a film layer and a nonwoven layer, wherein each of the film layer and the nonwoven layer comprise biodegradable thermoplastic polymers. As Gallagher in view of Moss appear to teach a substantially similar structure and composition as the claimed invention, Gallagher in view of Moss appears to anticipate the claim.

Rejection of Claims 50-52 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss and further in view of McCormack.

Appellants reiterate that Gallagher teaches away from using polyesters and polyester derivatives, that Moss cannot be combined with Gallagher since Gallagher teaches away from the use of polycaprolactone polymers, that it would not have been obvious to substitute Applicants' claimed polymers in the structure of Gallagher, that Gallagher does not disclose a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer, and that McCormack does not supply the deficiencies of Gallagher in view of Moss. Additionally, Appellants assert that neither Gallagher nor Moss discloses the limitation requiring two of the film layers adjacent with the claimed weight of filler

particles and the claimed weight of the biodegradable thermoplastic polymer having voids formed around the filler particles.

Regarding Appellants' first argument, Examiner respectfully disagrees. As set forth above, Gallagher does not appear to teach away from the polyester of the invention including polycaprolactone since Gallagher expressly teaches that polycaprolactone may be added to the polyester of the invention and Gallagher appears to teach that a preferred polyester may have adipic acid in a polyester terpolymer.

Although Appellants argue that Moss can not be combined with Gallagher, Gallagher expressly references Moss to teach microporous films when the invention of Gallagher includes filler materials (Gallagher, column 12 lines 45-48). Therefore, the Moss may clearly be combined with Gallagher with respect to the properties or techniques associated with forming a microporous film of the invention of Gallagher.

Gallagher teaches a water permeable film which is inherently breathable. Gallagher teaches stretching of films and microporous films formed by techniques set forth in Moss, wherein Moss teaches stretching microporous films to form breathable waterproof garments, diaper liners and blankets based on the pore size created by the stretching (Moss, column 9 lines 15-31). As set forth above, the invention of Gallagher in view of Moss appears to teach a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer or it would have been obvious to one of ordinary skill in the biodegradable textile art to form such a structure based on the teachings of Gallagher in view of Moss. Therefore, Gallagher or Gallagher in view of Moss clearly teaches a breathable film

and nonwoven web in which the film and the web comprise a biodegradable thermoplastic polymer.

It should be noted that Examiner does not rely on McCormack to teach a film layer and a nonwoven layer, wherein each of the film layer and the nonwoven layer comprise biodegradable thermoplastic polymers. As Gallagher in view of Moss appear to teach a substantially similar structure and composition as the claimed invention, Gallagher in view of Moss appears to anticipate the claim.

Regarding Appellants' second argument, Examiner respectfully disagrees. Gallagher teaches multiple embodiments and uses for the biodegradable thermoplastic polymer including in components of a disposable diaper. Additionally, Gallagher clearly sets forth that the topsheet may comprise a film, wherein the film is the biodegradable thermoplastic polymer (column 11 lines 49-56), and that additional components, such as the leakage shield, may be made from films of this invention and may be glued, thermally bonded or sonically bonded to the topsheet or the topsheet and backsheet (column 12 lines 4-8). Gallagher teaches that the films of the invention may be microporous, stretched, and include fillers, wherein the microporous film is formed according to techniques set forth in Moss, which teaches the forming of voids by stretching. Additionally, McCormack appears to teach the weight limitations of the filler and the biodegradable thermoplastic polymer and it would have been obvious to modify the teachings of Gallagher in view of Moss to customize the fluid stability of the composition in Gallagher and Moss. Therefore, Gallagher in view of Moss and further in view of McCormack, appear to teach the two layer film wherein the film layers are adjacent and each comprising the claimed weight of the filler particles and the biodegradable thermoplastic polymer, wherein the film has voids.

Rejection of Claims 42 and 43 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss and further in view of Trinh or Borgher.

Appellants reiterate that Gallagher teaches away from using polyesters and polyester derivatives, that Moss cannot be combined with Gallagher since Gallagher teaches away from the use of polycaprolactone polymers, and that Gallagher does not disclose a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer. Additionally, Appellants assert that the combination of Borgher or Trinh with Gallagher in view of Moss, do not teach or suggest Applicants' use of cyclodextrin as a filler material embedded within a matrix of a biodegradable thermoplastic polymer.

Regarding Appellants' first argument, Examiner respectfully disagrees. As set forth above, Gallagher does not appear to teach away from the polyester of the invention including polycaprolactone since Gallagher expressly teaches that polycaprolactone may be added to the polyester of the invention and Gallagher appears to teach that a preferred polyester may have adipic acid in a polyester terpolymer.

Although Appellants argue that Moss can not be combined with Gallagher, Gallagher expressly references Moss to teach microporous films when the invention of Gallagher includes filler materials (Gallagher, column 12 lines 45-48). Therefore, the Moss may clearly be combined with Gallagher with respect to the properties or techniques associated with forming a microporous film of the invention of Gallagher.

Gallagher teaches a water permeable film which is inherently breathable. Gallagher teaches stretching of films and microporous films formed by techniques set forth in Moss, wherein Moss teaches stretching microporous films to form breathable waterproof garments,

diaper liners and blankets based on the pore size created by the stretching (Moss, column 9 lines 15-31). As set forth above, the invention of Gallagher in view of Moss appears to teach a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer or it would have been obvious to one of ordinary skill in the biodegradable textile art to form such a structure based on the teachings of Gallagher in view of Moss. Therefore, Gallagher or Gallagher in view of Moss clearly teaches a breathable film and nonwoven web in which the film and the web comprise a biodegradable thermoplastic polymer.

It should be noted that Examiner does not rely on Borgher nor Trinh to teach a film layer and a nonwoven layer, wherein each of the film layer and the nonwoven layer comprise biodegradable thermoplastic polymers. As Gallagher in view of Moss appear to teach a substantially similar structure and composition as the claimed invention, Gallagher in view of Moss appears to anticipate the claim.

Regarding Appellants' second argument Examiner respectfully disagrees. It should be noted that structurally, Appellants do not claim a filler material embedded within a matrix of a biodegradable thermoplastic polymer film layer, nor do Appellants claim any function or properties associated with the filler material or any function or properties that may not be associated with the filler material. Therefore, Appellants only claim in claims 42 and 43 that the filler is a biodegradable filler particle, wherein the particle comprises cyclodextrin.

First, Gallagher in view of Moss appears to teach a substantially similar structure and composition of independent claim 21, from which claims 42 and 43 depend. Therefore, the motivation for which Examiner relies is motivation to substitute the filler particles as taught by

Gallagher with the cyclodextrin filler particles as taught by Borgher and Trinh. Gallagher teaches that the filler material may be added to enhance disintegratability (Gallagher, column 12 lines 26-30). As set forth above, Borgher teaches the use of cyclodextrin in disposable absorbent products like diapers and catamenial articles (Borgher, column 3 line 65 to column 4 line 65) applied as a spray or as a powder (Borgher, column 25 line 7-20). Trinh teaches the use of alpha-cyclodextrin in fabrics, which are highly water-soluble (Trinh, column 7 line 46 to column 8 line 53), in the form of a spray of very fine or finely divided particles or droplets (Trinh, column 40 lines 14-19). Additionally, as disclosed in Appellants' specification, cyclodextrin compounds and their derivatives, including alpha cyclodextrin, are inherently biodegradable (paragraph 0030 and 0031).

As it was known in the diaper art to add cyclodextrin compounds to disposable diapers and fabrics at the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the fillers disclosed in Gallagher with the inherently biodegradable cyclodextrin, as taught in Borgher and Trinh, motivated by the desire to use appropriate fillers which enhance disintegratability by being highly water-soluble or biodegradable while being particularly finely divided particulates. As the cyclodextrin of Borgher or Trinh appear to be a fillers suitable for the purpose of Gallagher in view of Moss, the claims appear anticipated by the combined teachings of the references.

Rejection of Claim 37 under 35 U.S.C. 103(a) as being obvious over Gallagher in view of Moss and further in view of Chandler.

Appellants reiterate that Gallagher teaches away from using polyesters and polyester derivatives, that Moss cannot be combined with Gallagher since Gallagher teaches away from the use of polycaprolactone polymers, and that Gallagher does not disclose a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer. Additionally, Appellants assert that Chandler does not supply the deficiencies of Gallagher and Moss. Additionally, Appellants assert that the claimed terpolymer is not functionally equivalent to the polymers disclosed in Gallagher.

Regarding Appellants' first argument, Examiner respectfully disagrees. As set forth above, Gallagher does not appear to teach away from the polyester of the invention including polycaprolactone since Gallagher expressly teaches that polycaprolactone may be added to the polyester of the invention and Gallagher appears to teach that a preferred polyester may have adipic acid in a polyester terpolymer.

Although Appellants argue that Moss can not be combined with Gallagher, Gallagher expressly references Moss to teach microporous films when the invention of Gallagher includes filler materials (Gallagher, column 12 lines 45-48). Therefore, the Moss may clearly be combined with Gallagher with respect to the properties or techniques associated with forming a microporous film of the invention of Gallagher.

Gallagher teaches a water permeable film which is inherently breathable. Gallagher teaches stretching of films and microporous films formed by techniques set forth in Moss, wherein Moss teaches stretching microporous films to form breathable waterproof garments,

diaper liners and blankets based on the pore size created by the stretching (Moss, column 9 lines 15-31). As set forth above, the invention of Gallagher in view of Moss appears to teach a breathable outer cover laminate in which every film layer and the nonwoven web includes a biodegradable thermoplastic polymer or it would have been obvious to one of ordinary skill in the biodegradable textile art to form such a structure based on the teachings of Gallagher in view of Moss. Therefore, Gallagher or Gallagher in view of Moss clearly teaches a breathable film and nonwoven web in which the film and the web comprise a biodegradable thermoplastic polymer.

Regarding Appellants' second argument, Examiner respectfully disagrees. It should be noted that Examiner does not rely on Chandler to teach a film layer and a nonwoven layer, wherein each of the film layer and the nonwoven layer comprise biodegradable thermoplastic polymers. As Gallagher in view of Moss appear to teach a substantially similar structure and composition as the claimed invention, Gallagher in view of Moss appears to anticipate the claim.

Regarding Appellants' third argument, Examiner respectfully disagrees. First, Gallagher appears to teach a polyester polymer prepared from polycaprolactone. Second, although appears to teach that a preferred polyester may have adipic acid in a polyester terpolymer, in the event that Gallagher does not teach a terpolymer of adipic acid, Appellants' disclosure teaches that ECOFLEX is a polyester terpolymer of terephtalic acid, adipic acid and 1,4-butanediol (Appellants' specification, page 9 line 19 to page 10 line 4). It should be noted that the only property or function associated with the film layer is the limitation that the film layer is a biodegradable thermoplastic polymer.

Chandler appears to teach that in the biodegradable film substrate art, ECOFLEX and polyester polymers prepared from polycaprolactones are interchangeable or functional equivalents in the art as after the films have served their useful purpose, they may be discarded as biodegradable materials to be received in conventional composting fields. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use commercially available functional equivalents in practicing that which is taught by Gallagher and Moss. One of ordinary skill in the art would have been motivated by convenience and efficiency provided by a commercially available prepared composition as Appellants' have not claimed any specific property or function associated with the film layer which would provide evidence that ECOFLEX and polymers prepared from polycaprolactones are not functional equivalents in the art.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Peter Y. Choi/
Examiner, Art Unit 1771
August 28, 2007

/Andrew T Piziali/
Primary Examiner, Art Unit 1771

Conferees:

Carol Chaney

Romulo Delmendo